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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/722,634

11/28/2000

Ramesh Mantha

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09/20/2004

PATENT ADMINSTRATOR
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EXAMINER

GEORGE, KEITH M

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/722,634

Applicant(s)

MANTHA, RAMESH

Examiner

Keith M. George

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 and 16-22 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 6-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2_3_</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Canada on 14 September 2000. It is noted, however, that applicant has not filed a certified copy of the 2,319,287 application as required by 35 U.S.C. 119(b).

Claim Objections

2. Claims 6-15 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only and cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 16 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu, U.S. Patent 5,714,944, hereinafter Shimizu in view of Sawyer, U.S. Patent 5,634,195, hereinafter Sawyer.

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5. Referring to claims 1 and 20-22, Shimizu teaches a selective call receiver with a display having a time function capable of receiving at least two kinds of transmitted information signals (at least one receiving-station being operable to receive at least two different communications services) (column 1, lines 12-14). Shimizu teaches the above with the possible exception of teaching a transmitting station for transmitting each service to at least one receiving station using a portion of a power budget such that the power budget is substantially consumed. Sawyer teaches a system and method for automatically verifying and setting the optimum base station and mobile station output power levels on radio channels (column 2, lines 48-51). Sawyer goes on to teach that a system and method for determining a maximum output power level used on the automatically regulated channels of a base station, comparing this maximum output power level with output power levels set for other channels of the base station and then reporting discrepancies between the maximum output power level of the regulated channels the output power levels set of the other channels to the system operator for evaluation and possible instigation of manual adjustment to the power levels or the other channels (column 3, lines 1-10). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to compare the power levels of each channel as taught by Sawyer with the receiver capable of receiving at least two kinds of transmitted signals taught by Shimizu. One of ordinary skill in the art would have been motivated to this because some radio channels cannot be efficiently regulated by any process that makes quality measurements at a receiving device on a received signal transmitted on a radio channel (Sawyer, column 2, lines 52-57).

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6. Referring to claims 2 and 5, Sawyer is clearly teaching communication between a base station and a subscriber station in a cellular mobile telecommunications system and teaches controlling the power of both the base station and the mobile station (column 2, lines 49-50).

7. Referring to claim 3, Shimizu and Sawyer have clearly taught in reference to claim 2 above the transmission of at least two kinds of signals to a receiver. The networks referred to by Shimizu and Sawyer are obviously not limited to a single transmitter and a single receiver, but can be used in large systems consisting of a plurality of transmitters and receivers. One of ordinary skill in the art would easily understand that the signals sent by Shimizu and Sawyer could have a plurality of destinations. One of ordinary skill in the art would be motivated to understand this because cellular mobile telecommunications systems described by Sawyer clearly teach this point.

8. Referring to claim 4, Shimizu has clearly taught a call receiver capable of receiving at least two kinds of transmitted information signals (column 1, lines 13-15).

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu and Sawyer as applied to claim 1 above, and further in view of Krongold et al., U.S. Patent 6,400,773, hereinafter Krongold.

10. Referring to claim 16, Shimizu and Sawyer teach the system described in reference to claim 1 above with the possible exception of allocating an amount of power that was consumed during a known time period. Krongold teaches a system in which an optimal solution is guaranteed when either a newly chosen power allocation meets the power budget exactly or a newly chosen power budget equals the high or low power of a previous iteration (column 3, lines 13-16). At the time the invention was made, it would have been obvious to a person of ordinary

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skill in the art to allocate power of a previous iteration (known time period) as taught by Krongold in the system of Shimizu and Sawyer. One of ordinary skill in the art would have been motivated to do this to produce an optimal solution when such a solution is desirable (Krongold, column 2, lines 40-42).

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Krongold.

13. Referring to claims 17, 19, Krongold teaches tables that are used to determine the rate-power characteristics at each iteration (predicting power requirements for a future time period). And that an optimal solution is guaranteed when either a newly chosen power budget meets the power budget exactly or a newly chosen power budget equals the high or low power of a previous iteration (allocating a portion of the power budget based on the prediction) (column 3, lines 10-16).

14. Referring to claim 18, as was taught above in claim 17, Krongold teaches that an optimal solution is guaranteed when either a newly chosen power budget meets the power budget exactly or a newly chosen power budget equals the high or low power of a previous iteration (current time period).

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Conclusion


15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Yun, U.S. Patent 6,463,295 teaches power control with signal quality estimation for smart antenna communication systems.
- b. Honkasalo et al., U.S. Patent 6,219,343 teaches rate control techniques for efficient high speed data services.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith M. George whose telephone number is 571-272-3099. The examiner can normally be reached on M-Th 7:00-4:30, alternate F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Keith M. George
17 September 2004



CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800 9/17/04